

**ABSTRACT**

The invention consists of a method for treating polychlorinated biphenyl (PCB) contaminated media by: a) 5 combining the media with a fluid containing one or more liquid hydrocarbons to form a media/fluid mixture; b) sonicating the mixture at audio frequency to extract PCB from the media into the fluid; and c) treating the fluid with sodium-containing alkali metal. The method may include additional steps to 10 reduce the size of the media. Alternatively, the fluid can be decanted from the media after sonication and treated separately with sodium-containing alkali metal.